## **R-2616 Project Synopsis**

# **Project Description and Purpose:**

- The Design Build Project, R-2616, extends from north of the South Carolina State Line to north of SR 2105 (Marion Lee Road) in Union County, a distance of approximately 10.8 miles. The proposed improvements consist of widening US 601 to a four-lane divided facility with partial control of access. Directional cross-overs with median U-Turns, which improve safety, are also included in the proposed improvements.
- The primary purpose of this project is to improve highway safety on US 601. The secondary purpose is to increase the capacity of the facility. The need for this project is based on a history of severe crashes on US 601 and a fatality rate higher than the statewide average for similar facilities.

### Planning:

- An Environmental Assessment (EA) was approved on May 24, 1994 and a Finding of No Significant Impact (FONSI) was approved on September 29, 1994. A Reevaluation of EA and FONSI was approved on August 31, 2004. The Design -Build Team shall adhere to all commitments stated in the environmental documents. Copies of these documents will be made available to the short-listed Design - Build Teams and / or posted on the NCDOT Design - Build web page.
- TIP Project R-2616 has followed the Merger 01 Process. Relative correspondence resulting from the merger team meetings will be made available to the short-listed Design Build Teams.

#### **Public Involvement Scope of Work:**

• During the project's construction, the Design - Build Team shall coordinate with the Division 10 Office and the Construction Unit to inform the public of lane closures, construction progress, etc.

#### **Roadway Scope of Work:**

- The Design Build Team shall design and construct a four-lane divided facility with a 46-foot median from north of the South Carolina State Line to north of Marion Lee Road (SR 2105). The proposed facility will tie to the existing five-lane typical section at the northern and southern termini
- US 601 shall be designed and constructed to meet a 60-mph design speed for a flat rural principal arterial.
- Asymmetrical best-fit widening, that minimizes impacts to the human and natural environments, has been selected as the US 601 Least Environmentally Damaging Practicable Alternative (LEDPA). Any variations to the Department's proposed design and / or construction methods that nullify LEDPA and / or require additional

- coordination with the Environmental Agencies shall be the sole responsibility of the Design Build Team.
- At grade intersections with directional cross-overs and median U-Turns shall be designed and constructed along the mainline as shown on the Right of Way Plans.
- The Design Build Team shall design and construct -Y- Line improvements as shown on the Right of Way Plans. The limits of the -Y- Line construction shall be of sufficient length to tie to the existing alignments based upon the current guidelines and standards.
- The Design Build Team shall design and construct R-2616 as a partial control of access facility. All parcels with 2000 feet of frontage, or less, along US 601 shall be provided only one access point. For those parcels with less than 2000 feet of frontage along US 601 and access along another roadway, access may be denied along US 601.

# **Structure Scope of Work:**

- The Design Build Team shall design and construct dual bridges at Lanes Creek.
- The Design Build Team shall remove the existing inadequately sized concrete box culverts at Mill Creek, Cowpens Branch and Tributary of Cowpens Branch. The Design Build Team shall design and construct appropriately sized box culverts at these locations.
- The Design Build Team shall remove the existing concrete box culvert at Wicker Branch. The Design Build Team shall design and construct a bottomless culvert at this location.

#### **Hydraulic Scope of Work:**

- The Design Build Team shall be responsible for all storm drainage design and construction.
- The Design Build Team shall be responsible for the design and construction of hazardous spill basins for the crossing of two unnamed tributaries of Buck Branch located north and south of McRorie Road (SR 1952).
- The Design Build Team shall be responsible for coordinating with Union County and FEMA to facilitate the floodway revision process and ensure compliance with applicable floodplain ordinances. If required, the Design Build Team shall be responsible for development and approval of all FEMA compliance.
- The Design Build Team shall be responsible for any permit modifications resulting from revisions to the Department's preliminary design and / or construction methods.

## **Location and Surveys Scope of Work:**

- Electronic surveys are completed and will be provided to the short-listed teams.
  Subsequent to acquiring the surveys, US 601 has been resurfaced and paved shoulders constructed. Supplemental surveys shall be the responsibility of the Design Build Team.
- Known existing utilities have been located and will be included with the survey data. All supplemental SUE work shall be the responsibility of the Design Build Team.
- All structure surveys shall be the responsibility of the Design Build Team.

### **Geotechnical Scope of Work:**

- Roadway and structure subsurface investigations will be provided to the short-listed Design Build Teams. The Design Build Team shall be responsible for all recommendations, as well as supplemental structural and roadway investigations.
- All foundation designs and recommendations shall be the responsibility of the Design
  Build Team.

# **Geoenvironmental Scope of Work:**

- Eleven known underground storage tank (UST) facilities and one methamphetamine laboratory have been discovered on the project and have the potential to be contaminated. The NCDOT will complete preliminary environmental studies on these sites and provide the results to the short-listed Design Build Teams.
- The Design Build Team shall adhere to all Right of Way Branch procedures regarding the acquisition of contaminated property and the right of way acquisition recommendations provided by the Department.
- If any additional contaminated sites are discovered within the right of way, it shall be the Design Build Team's responsibility to contact the Geotechnical Unit.
- The Design Build Team and NCDOT responsibilities for geoenvironmental remediations will be outlined in the RFP.

#### **Environmental Scope of Work:**

• The Department will be responsible for acquiring the environmental permit. The Design - Build Team shall be responsible for preparing all documents necessary for obtaining any permit modifications resulting from revisions to the Department's preliminary design and / or construction methods.

### **Erosion Control Scope of Work:**

- All erosion control designs and implementation shall be the responsibility of the Design Build Team.
- The Design Build Team shall have an erosion control inspector on the project at all

times during construction.

# Traffic Control and Pavement Marking Scope of Work:

- The Design Build Team shall be responsible for developing the Traffic Control and Pavement Marking Plans.
- A list of parameters, such as lane closures, time restrictions and general guidelines, will be provided to the short-listed teams.

### **Pavement Design Scope of Work:**

- Final asphalt pavement designs will be provided to all short-listed teams.
- The Design Build Team shall be responsible for all temporary pavement designs and the evaluation of existing shoulders regarding their suitability for carrying traffic during construction. If required, the Design Build Team shall be responsible for strengthening existing shoulders prior to routing traffic on them.

### **Signing Scope of Work:**

The design and installation of roadway signs shall be the responsibility of the Design
 Build Team.

# Right of Way Acquisition Scope of Work:

- The Department has begun the right of way acquisition process. The Design Build Team shall be responsible for all right of way and easement acquisitions not finalized upon award of the contract.
- The Design Build Team shall be responsible for any additional right of way and easement acquisitions required by the proposed design and / or construction for those parcels that the Department completed the R/W acquisition process.

### R/W Utilities, Conflicts and/or Construction Scope of Work:

- The Design Build Team shall be responsible for all utility conflicts / relocations and utility construction plans. Coordination shall include any necessary utility agreements when applicable.
- The Design Build Team shall be responsible for coordinating the construction / relocation of private utilities with the appropriate owners. The Department shall be responsible for non-betterment utility relocation costs when the utility company has prior rights of way / compensable interest. The utility company shall be responsible for the relocation cost if they cannot furnish evidence of prior rights of way or a compensable interest in their facilities.

## **Construction Engineering Inspection (CEI) Scope of Work:**

• The Division Office shall be responsible for CEI work.